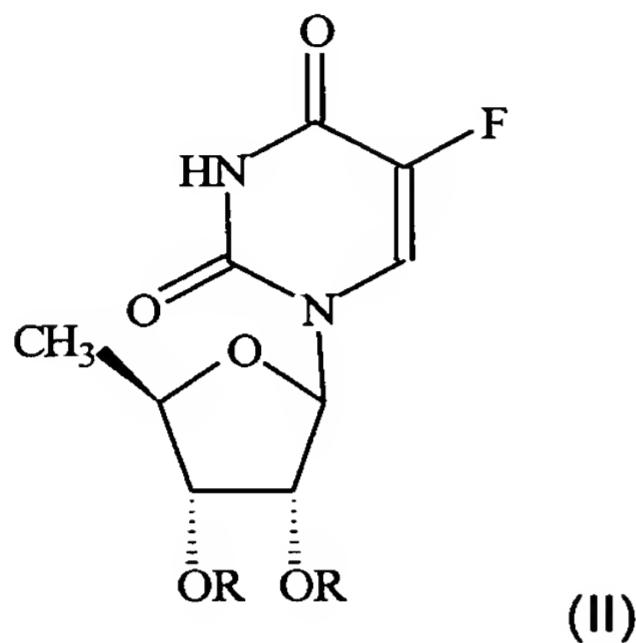


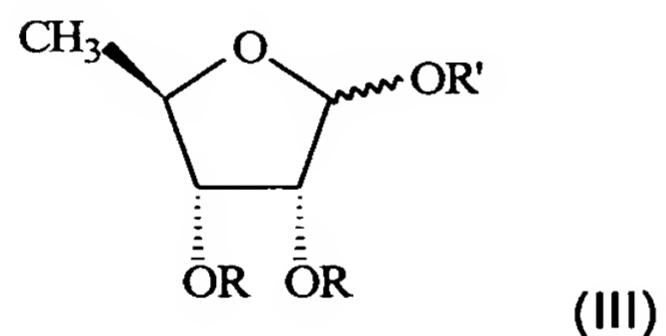
CLAIMS

1. A process for preparing a compound of formula



in which R represents linear or branched C₁-C₅ aliphatic acyl or benzoyl, optionally substituted with C₁-C₅ alkyls, C₁-C₅ alkoxyls or halogens,

10 which comprises the reaction of coupling of a compound of formula

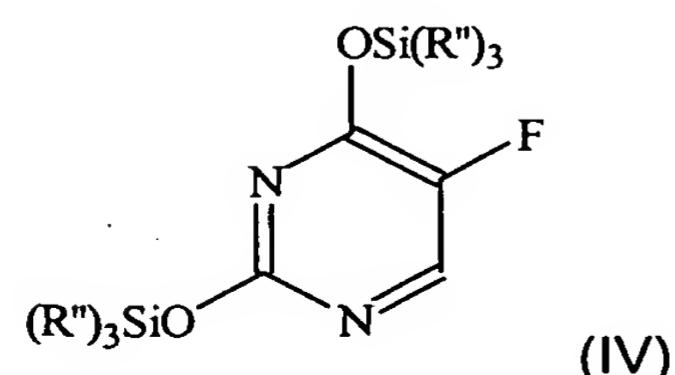


in which

15 R represents a linear or branched C₁-C₅ aliphatic acyl or benzoyl, optionally substituted with C₁-C₅ alkyls, C₁-C₅ alkoxyls or halogens,
 R' represents R or a linear or branched C₁-C₅ alkyl,

with a compound of formula

20



in which R", being identical or different, represents a C₁-C₆ alkyl or a phenyl, in the presence of a Lewis acid and in an inert organic solvent, characterized in that said Lewis acid is added at a temperature below 0°C.

- 5 2. A process according to claim 1 in which said addition of catalyst is carried out at a temperature below -10°C , preferably between approx. -15 and -20°C .

10 3. A process according to claim 1 in which, on completion of said addition of catalyst, the reaction mixture is held further at the same temperature.

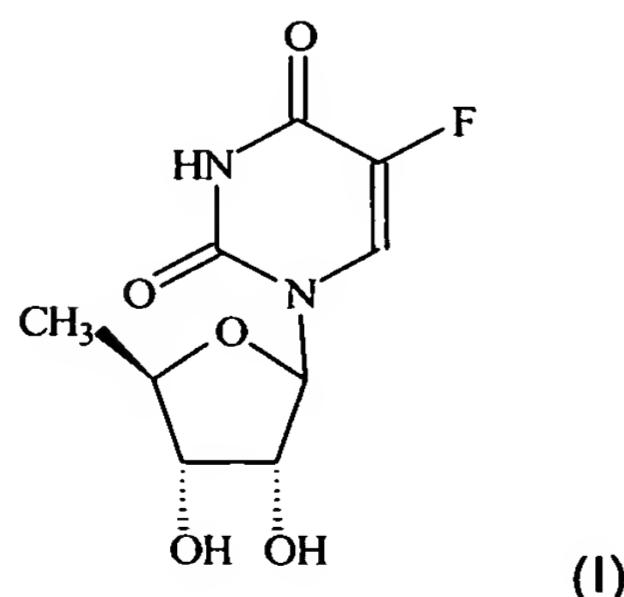
15 4. A process according to claim 1 in which R and R' represent acyl, preferably acetyl, and R" represents methyl.

5. A process according to claim 1 in which said Lewis acid is selected from trimethylsilyltrifluoromethanesulphonate and tin tetrachloride, and is preferably tin tetrachloride.

20 6. A process according to claim 1 in which said inert organic solvent is selected from chlorinated solvents or aromatic solvents, preferably chlorinated solvents.

7. A process according to claim 1 in which said compound of formula II, in which R has the meanings stated above, is further submitted to a reaction of deprotection to give doxifluridine of formula I.

25 8. A process for the preparation of doxifluridine of formula



that comprises a process according to one of the claims from 1 to 7.